CLAIM AMENDMENTS

1. Canceled

2. (Currently amended) In a multiple move, processor based simulated annealing method for resolving a scheduling problem associated with a plurality of orders for train resources, each order having a cost function and a scheduling window associated therewith, the improvement comprising the steps of:

(a) establishing plural criteria for acceptance of a solution;

(b) classifying the scheduling problem; and

(c) selecting the criteria for acceptance of a solution as a function of the classification of the scheduling problem

wherein the step of classifying includes the steps of:

(i) determining the total trip time associated with the plurality of orders;

(ii) determining the total slack time associated with the plurality of orders;

(iii) determining the classification of the problem as a function of the total trip time and the slack time.

3. (Previously presented) The method of Claim 2 wherein the step of determining the classification is determined by the steps of:

(a) selecting a predetermined percentage of total trip time to provide a threshold value; and

(b) comparing slack time with the threshold value.

4. (Original) The method of Claim 3 wherein the selected percentage is less than

about one hundred percent.

5. (Original) The method of Claim 3 wherein the selected percentage is more than about one hundred fifty percent.

6. (Currently Amended) In a multiple move, processor based simulated annealing method for resolving a scheduling problem associated with a plurality of orders for train resources, each order having a cost function and a scheduling window associated therewith, the improvement comprising the steps of:

(a) establishing plural criteria for acceptance of a solution;

(b) classifying the scheduling problem; and

(c) selecting the criteria for acceptance of a solution as a function of the classification of the scheduling problem

wherein the step of classifying includes the steps of:

(i) determining the total trip time associated with the plurality of orders;

(ii) determining the resource exception associated with the plurality of orders;

(iii) determining the classification of the problem as a function of the total trip time and the resource exception.

7. (previously presented) The method of Claim 6 wherein the step of determining the classification is determined by the steps of :

(a) selecting a predetermined percentage of total trip time to provide a threshold value; and

(b) comparing resource exception with the threshold value.

8-12 (cancelled).

13. (Currently Amended)) A method for resolving a scheduling problem associated with a plurality of orders for train resources by evaluating available moves in a computer based simulated annealing process, each move resulting in a change in the resource exception associated with the problem and a change in cost associated with the move, comprising the steps of:

(a) classifying the scheduling problem;

(b) making a random move;

(c) weighting the resource exception and cost factors associated with the random move with a scaling parameter related to the classification of the problem;

(d) evaluating the resource exception and the cost of the solution against a predetermined criteria; and

(e) accepting or rejecting the move based on the evaluation.

14. (previously presented) The method of Claim 13 wherein the step of determining the scaling parameter by the steps of:

(i) determining a normalizing component of the scaling parameter as a function of the change in resource exception and cost from previous moves;

(ii) determining a target resource exception as a function of the number of previous moves; and

(iii) determining a biasing component of the scaling parameter as a function of a comparison of the resource exception of the current move to the target resource

exception.

15. (Original) The method of Claim 14 wherein the predetermined criteria is the classification of the problem.

16. (Original) The method of Claim 13 wherein the predetermined criteria is the classification of the problem.

17.-19 (cancelled)